

Objective.– To evaluate the impact of 6-month training by whole body vibration on functional and motor abilities among nursing home residents observed over a 12-month period.

Methods.– Patients were randomized into two groups: the whole body vibration group which received three training sessions every week composed of five series of only 15 seconds of vibration at 30 Hz intensity for a period of 6 months and a control group with normal daily life. The impact of this training was assessed blindly after 6 and 12 months by the Tinetti Test, the “Timed Up and Go” test and a quantitative evaluation of walk performed with a tri-axial accelerometer. The occurrence of falls was also observed.

Results.– Sixty-two elderly healthy volunteers (47 women and 15 men, mean age 83.2 ± 7.9 years) were included in this study. No significant change in the studied parameters was observed between the two groups after 6 and 12 months of follow-up, except for the step length change observed after 12 months ($P < 0.01$). No significant inter-group difference in the frequency of falls was observed ($P = 0.06$ during the first six months and $P = 0.52$ during the next six months).

Conclusion.– This study failed to establish the effectiveness of training by low doses of whole body vibration, under the conditions used in our study, on functional and motor abilities of institutionalized elderly patients. However, further investigations, with modified therapeutic protocols, seem necessary to clarify the effects of whole body vibration in the elderly.

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Flanders' falls awareness week: An example of promoting fall prevention strategies within the community and residential care settings



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Introduction.– Falls in older persons are common and may lead to serious consequences (e.g. fractures, fear of falling, economic burden). Ample evidence is available about effective fall prevention (FP) strategies, but implementation in routine practice remains problematic.

Methods.– The Center of Expertise for Falls & fracture Prevention (Expertisecentrum Val- en fractuurpreventie Vlaanderen) aims to improve FP by addressing local needs, barriers to and facilitators of implementing effective strategies. By means of an annual falls awareness week (FAW), anyone working with older persons co-operates to deliver a similar message; e.g. “Stay active, avoid falling!”. The overall objective of the FAW 2013 is to encourage older people to stay fit and physically active as long as possible. Participating organizations are provided with a wide range of evidence based materials, activities and resources to promote physical activity and FP (e.g. leaflets, an activity pyramid, advanced exercise programs, “Lifelong dancing”-parties, etc.).

Results.– As a result, 769 organizations in Flanders participated during the FAW 2013. More specifically, 244 home care organizations, 360 residential care facilities, 61 hospitals and 104 other organizations organized their own FAW event.

Conclusions.– The FAW can be considered a valuable strategy to promote FP within the community and residential care. By focusing on the positive effects of mobility rather than on the negative effects of immobilization, Flemish older persons are stimulated to stay active, hereby reducing their fall risk.

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Effect of whole-body-vibration training in institutionalized older adults



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Introduction.– Prevention of falls is an important health problem. Whole body vibration training of high intensity and low amplitude induces a gain in balance and muscle strength. The present study sought to examine whether such a whole body vibration training of low intensity and high amplitude, more adapted to frail persons, may reduce the incidence of falls in nursing homes.

Methods.– One hundred and fifteen women and 39 men living in nursing homes (85.0 ± 6.8 years) able to walk and with no contraindication to whole body vibration (WVB) were randomized into a group performing exercises on a vibrating platform (1.5 Hz to 2.4 Hz; amplitude: 30 mm) or a group performing the same exercises on non-vibrating platform. Exercises consisted in squat movements with different stance widths and durations (3×30 s to 9×40 s), three times a week (20 minutes per session). Falls were recorded prospectively for the 6-month program.

Results.– Subjects of WVB group were followed for an average of 4.4 month and 4.9 in the control group ($P = 0.13$). Subjects of WVB group experienced 0.11 fall by month, comparatively to 0.17 in the control group ($P = 0.38$). The risk of falling was not significantly different between the WVB and the control groups (0.09 vs 0.12 faller by month, respectively) ($P = 0.36$).

Conclusion.– A 6-month physical activity program using a low frequency and high amplitude vibrating platform does not reduce significantly neither the incidence of falls nor the risk of falling in frail older adults living in nursing homes, compared to the same program without any vibration.

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Bilateral Achilles' tendons rupture associated to levofloxacin



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In recent years, frequent cases of Achilles tendinitis as an adverse side effect of quinolones have been described. However and thus this may present commonly in elderly patients. Few cases have been reported of bilateral rupture of both Achilles tendons. The tendon damage recovery is erratic and can go on for long.

We describe a case of a 79-year old lady presenting with bilateral rupture of both Achilles tendons immediately after a Levofloxacin cycle of 10 days for respiratory infection. The consequences were two falls resulting in bilateral subcapital neck of femur fracture during the convalescence period of 6 months.

Although massive functional consequences, the multidisciplinary approach in a Geriatric Rehabilitation Unit with the inputs of Rehabilitation and Othopaedics Departments permitted functional recovery and home relocation, despite the lack of complete repair of both tendons, after 40 weeks of treatment.

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